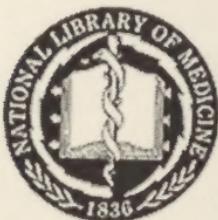


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REPORT
OF THE
New York (City)
COMMITTEE ON DIET
OF THE

Childrens' Nurseries on Randall's Island.

TO THE BOARD OF COMMISSIONERS
OF PUBLIC CHARITIES AND CORRECTION:

GENTLEMEN.—Your Committee, appointed October 3d, "to revise the Dietary Table of the Childrens' Nurseries on Randall's Island," beg leave to present the following Report:

We have carefully examined the various Departments on Randall's Island, excepting the Hospital Department, the dietary of which is already satisfactorily arranged, and have informed ourselves, by thoroughly interrogating the cooks and other officials, of the quantity and quality of the supplies furnished, the mode of preparation, and the manner of serving the food to the children. Our report will embody some general considerations concerning the alimentation of children such as are received into the Institutions on Randall's Island, a review of the present dietary of the Institutions, and suggestions with regard to improvements which have seemed to us necessary and practicable.

The nurseries contain from five hundred to six hundred children of various ages, divided as follows: the Quarantine has from fifty to sixty inmates, some of whom are permanent and others temporary, being removed in about ten days after their admission to the other departments. The permanent residents are from two to fourteen years of age; and the temporary residents are from five to fourteen. The population of this department is constantly changing, and the numbers are very variable. The Infants' Department has a population of about fifty, ranging from two to five years

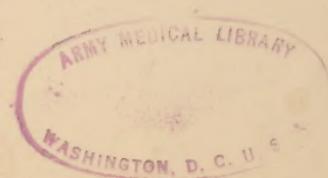
of age. The other departments are, the Small Boys, about one hundred in number, with ages ranging from five to seven ; the Large Boys, about two hundred and fifty in number, with ages ranging from seven to fourteen ; and the Girls, numbering about one hundred, from seven to fourteen years of age. The small boys and the girls take their meals together, and the large boys are served by themselves.

The small boys, the large boys, and the girls are supplied from the main kitchen, where the food of all is cooked together. The Quarantine and the Infants' Department have each their separate kitchens and supplies.

In our considerations regarding the diet of these children, the sick are excluded, as they are immediately transferred to the hospital.

In the alimentation of the Nurseries, certain peculiarities incident to the nutritive demands of the system in early life must be recognized. The inmates of the other Institutions under your charge, being adults, have passed through the perils of early life, and their constitutions have become fully developed. In them, the nutritive demands of the organism are about equal to the waste and the discharge of worn-out matter in the form of excretions. If either before or after their admission into the Institutions, the supply of nourishment be slightly deficient, the system becomes somewhat reduced ; but if this be not carried too far, a sufficient diet is capable of restoring nutritive activity, and they soon return to their normal condition. It is a fact well known to physiologists, that men who have arrived at full development are capable of enduring hardship, and recuperating after privations, which would produce permanent injury to the constitution in young persons on the threshold of adult life.

Children from two to fourteen years of age are not capable of resisting bad alimentation, either as regards quantity, quality or variety. At that age, the demands of the system for nourishment are in excess of the waste ; the extra quantity being required for growth and development. If the proper quantity and variety of food be not provided, full development cannot take place, and the children grow up, if they survive, into puny men and women, incapable of the ordinary amount of labor, and liable to diseases of various kinds. This is frequently illustrated in the higher walks of life, particularly in females ; for many suffer through life from improper diet in boarding schools, due to false and artificial notions of delicacy or refinement. After a certain period of improper and deficient diet in children, the appetite becomes permanently impaired, and the system is rendered in-



capable of appropriating the amount of matter necessary to proper development and growth.

We make these remarks to indicate the great importance of proper alimentation in children, and to show that their young and impressionable organizations are more sensitive than the system of the adult, and consequently that their alimentation should be more carefully watched.

Again, there are many articles of food proper for the adult, which cannot be taken by children; and while, in the latter, variety in diet is of great importance, it is more difficult to provide in public Institutions. Children soon become disgusted with a monotonous diet, and lose that relish for, and keen enjoyment of food, characteristic of youth. The necessity of a varied diet for the adult has been fully considered in a report by the Chairman of this Committee on the diet of the Bellevue Hospital. It is sufficient to say that this seems even more necessary in the alimentation of children.

DIETARY OF THE QUARANTINE.

(ESTIMATED FOR SIXTY INMATES).

At the Quarantine, the breakfast and the supper are the same throughout the week, while the dinners are more or less varied every day.

BREAKFAST, at 7, A. M.—*Cocoa*, a little more than half a pint for the smaller children, and a little less than a pint for the larger children; with bread for the larger, and bread and butter for the smaller children. At this meal, the bread is given in such quantity as the children desire. The cocoa is made in the following way :

One-half a pound of the cocoa is boiled with four quarts of milk, (American Condensed Milk Company's milk, to which four parts of water have been added),* and with water to make twenty quarts. To this are added two pounds of sugar.

SUPPER, at $5\frac{1}{2}$, P. M.—Bread and milk. The quantity of milk is from half a pint to a pint for each child, according to age. The Matron states that she does not consider it desirable to give the children at supper all the bread they can eat. One loaf of bread supplies about ten children; the quantity to each being graduated according to age.

* The milk referred to in this report is always to be understood as composed of one part of condensed milk to ten of water.

DINNER, at 12, M.—The arrangement of the dinners is as follows:

MONDAY.

Roast mutton, with bread.

TUESDAY.

Beef, potted or stewed, with bread.

WEDNESDAY.

Mutton soup, with the meat, and bread.

THURSDAY.

Roast beef or potted beef, with bread.

FRIDAY.

Codfish or haddock, stewed with potatoes, (ordinarily called “picked-up codfish), with bread.

SATURDAY.

Stewed beef, with bread.

SUNDAY.

Roast beef and mashed potatoes, with bread. (During the hot Summer months they have bread and milk, as much as they want, for their Sunday dinner.)

The supply of meat to the Quarantine is twenty-five pounds of beef or mutton (with the bones) each day except Friday, when twenty pounds of fish are substituted.

We do not find much to criticise in the dietary of the Quarantine. The quantity of meat is sufficient, and it is evidently well prepared, being cooked in the ordinary way, in a private kitchen. The quality of the cocoa is fair, though it might be improved by adding more milk. Potatoes should certainly be given more frequently. Crackers, between meals, are given to the smaller children. All the children, however, look well, and seem properly nourished; and we will defer our suggestions until we take up the diet issued from the main kitchen. The improved diet that we will there recommend should be applied to all the Departments.

DIETARY OF THE INFANTS' NURSERY.

(ESTIMATED FOR FIFTY INMATES.)

As in the Quarantine, the breakfast and supper are the same every day in the week, while the dinner is varied.

BREAKFAST, at $6\frac{1}{2}$ or 7, a. m.—Cocoa, from three-fourths of a pint to a pint, with as much bread as the children want. The cocoa is decidedly better than in the Quarantine. It is made with half a pound of cocoa, one and three-quarters of a pound of sugar, ten quarts of milk, and water added to make twenty quarts. This cocoa is as good as could be desired for children of the age of those in this Department, and the quantity given to each child is sufficient.

SUPPER, at 5, p. m.—Bread and milk, with butter every alternate day. The quantity of milk is from three-fourths of a pint to a pint for each child, and the children have as much bread as they can eat.

DINNER, at 12, m., as follows :

MONDAY.

Soup, made of mutton and vegetables, with bread.

TUESDAY.

Beef-tea, with the meat, with bread.

WEDNESDAY.

Roast mutton, cold slaw, and bread.

THURSDAY.

Meat and vegetable soup, with bread.

FRIDAY.

Codfish and potatoes, with bread.

SATURDAY.

Beef-tea, with the meat, and bread.

SUNDAY.

Roast beef and mashed potatoes, with bread.

All the children in the Infants' Nursery have crackers between meals.

The daily supplies of meat and fish are the same as at the Quarantine, viz: twenty-five pounds of beef or mutton each day except Friday, when twenty pounds of fish are substituted.

The diet at the Infants' Nursery seems somewhat better than at the Quarantine. Here it is represented that the children have all that they can eat; and when any child asks for more, it is always supplied. The cocoa is decidedly better than at Quarantine,

containing two and a half times more milk. With these exceptions, we have no remarks to make beyond what has already been said concerning the dietary at Quarantine.

DIETARY FOR THE SMALL BOYS, THE LARGE BOYS, AND THE GIRLS.

(ESTIMATED FOR FOUR HUNDRED AND FORTY).

As in the other Departments, the breakfast and supper are the same every day in the week, while the dinner is varied.

BREAKFAST.—Cocoa, about one pint for each child, with about seven ounces of bread.

The cocoa is prepared as follows:—Two and a half pounds of cocoa, four and a half quarts of molasses, twenty-eight quarts of milk, and water added to make two hundred and twenty-five quarts.

SUPPER.—Sweetened milk and water, about one pint for each child, containing twenty-eight quarts of milk, four and a half quarts of molasses, and water added to make two hundred and twenty-five quarts; and bread, about seven ounces to each child.

DINNER:—

MONDAY.

Pea soup, and five ounces of bread.

TUESDAY.

Roast beef, (weighing eight ounces before roasting,) five ounces of bread, and gravy thickened with flour

WEDNESDAY.

Roast beef, (weighing eight ounces before roasting,) five ounces of bread, and gravy without flour.

THURSDAY.

Roast beef, (weighing eight ounces before roasting,) five ounces of bread, and gravy without flour.

FRIDAY.

Three and one-tenth ounces of fish, (weighed before boiling), three ounces of potatoes, four ounces of bread, and gravy with flour and butter.

SATURDAY.

Boiled mutton, (weighing eight ounces before boiling), one pint of soup, and five ounces of bread.

SUNDAY.

Roast beef, (weighing eight ounces before roasting), a little less than half a pint of gravy, made from the meat drippings, with water added, and five pounds of flour to the whole, (one hundred quarts), three ounces of potatoes, and four ounces of bread.

The above diet table was obtained by one of your Committee, Dr. Whittelsey, and is believed to represent precisely what the children receive. The diet table furnished to the Committee by the Warden is appended to the report.

We will now direct our attention exclusively to the diet prepared in and furnished from the main kitchen. The improvements which we will suggest should, in the opinion of your Committee, be also adapted to the Quarantine and the Infants' Nursery. Although the diet in these Departments is good, it is susceptible of some improvement. It seems to your Committee desirable that the diet at the Quarantine should be brought fully up to the standard at the Infants' Nursery.

The quantity of meat furnished to the main kitchen is sufficient. From the report of the Commissary, it appears that two hundred and twenty pounds of meat are issued daily, with the exception of Friday, when ninety-five pounds of fish are substituted. Bread, which is of excellent quality in all the Institutions under your charge, should be given to each child without restriction as regards quantity.

The deficiencies in the diet are as follows: 1. There is not sufficient variety. The breakfast and the supper should be slightly modified during the week, whereas, at present, they are absolutely uniform. The starchy element is somewhat deficient. Potatoes present this alimentary principle in the best form for

assimilation, particularly for children. These are now given only on Friday and Sunday; whereas, they should be given *every day*. This is important; for experience and physiological experiments have shown that starch is very favorable to the development of fat in the body; and, other conditions being fulfilled, the deposition of a proper quantity of fat is a pretty good indication of the character of the general process of nutrition.

The cocoa is not sufficiently rich. It contains enough of the cocoa, which is a substance resembling, in its effects, tea and coffee, though not so powerful. Children do not require these agents to the extent to which they are desirable in the adult, and the preparations of chocolate are undoubtedly the best that can be used. It would be well to alternate the cocoa with plain chocolate and with broma, which are all about the same price. The Chairman of your Committee has had considerable experience with the preparations of Walter Baker & Co., of Boston, which he has found of excellent quality. The chief nutritive element in the cocoa, as it is given to the children, is the milk. This is not introduced in sufficient quantity, though the use of condensed milk secures a good and a uniform article. Your Committee would suggest that the cocoa, chocolate or broma be made as follows:

One half pound of cocoa, or the other preparations; ten quarts of milk, (made by adding four parts of water to one of condensed milk), and ten quarts of water. The whole making twenty quarts; to be carefully boiled, thoroughly stirred, and about two and a half pounds of sugar to be added.

The milk which is taken with bread for supper is too dilute by far; and it must be remembered that milk presents in itself the very best nourishment for children, containing, as it does, a great variety of alimentary principles. One part of condensed milk is now diluted with thirty-two parts of water, and sweetened with molasses to make it a little less thin to the taste. The condensed milk should be diluted with about six parts of water, and, in the main kitchen at least, sweetening is not necessary. From three-quarters of a pint to a pint of such milk, with bread, would make a sufficient, a healthful, and a palatable supper for children.

The pea-soup as now prepared is not good. This is an excellent article of diet if skilfully made, but otherwise it is very distasteful to children. Small pieces of fried bread in the pea-soup would also be much relished; but in case the soup be not very well made, in the opinion of your Committee, its use should be discontinued.

Occasional stews, instead of soups, would be much better for the children, and would undoubtedly be more relished.

Children do not use condiments freely, but it is desirable that their food should be carefully but not highly seasoned, and that they should get vinegar occasionally. With this view, we would recommend that a small quantity of pickled cabbage or beets be issued about twice a week, served in separate dishes, so as not to be mixed with the other articles.

It is desirable, also, that the children should have about twice a week, what would be considered by them as luxuries. A bread, or rice, or Indian pudding, would answer this end, and would undoubtedly improve the condition of the children.

COOKING.—After proper quantity and quality of supplies, the item of cooking is of paramount importance. Ovens should be constructed for roasting and baking on a large scale, and every facility should be afforded for the careful and scientific preparation of food. Your Committee do not believe that roasting (?) can be well done in the steam kettles which are now used for that purpose. We do not think it necessary to discuss the questions of the savings and the improvement in diet which would be brought about by the employment of an educated and responsible cook. We believe that the saving alone would be so great that the question of salary paid to a competent person would not be one of much importance. The chief fault which we have to find in the main kitchen is that the supplies, which are entirely sufficient, are not well prepared, and that consequently much must be wasted. The gravies are now frequently made by simply adding water to the meat drippings. Sometimes they are thickened with flour; but this should always be done, and they should be appropriately seasoned. Again, an uneducated cook has no resources if the supplies should accidentally be deficient for a day; while a good cook would always be able to carry over any such temporary difficulty satisfactorily. Your Committee refer the Commissioners to their experience in the cooking at the Bellevue Hospital, which we believe illustrates these facts.

We would therefore recommend the employment of a competent male cook, who should have immediate charge of the main kitchen, and exercise a supervision over the kitchens at the Quarantine and the Infants' Nursery. He should have for his general guidance a proper diet-scale, but should have a limited amount of discretionary power which would enable him to vary the mode of cooking occasionally.

When the cooked food is to be carried from the main kitchen to other buildings, it should be carefully protected so that it may be hot and palatable when served. For this purpose, large cop-

per vessels, with well-fitting covers, should be provided. In ordinary tin pails, the heat is not sufficiently well retained.

Your Committee is of the opinion that the following diet-scale will effect most of the improvements which they have had the honor to suggest:

Proposed Diet-Scale.

M O N D A Y.

BREAKFAST—Cocoa or broma; bread and butter.

DINNER—Mutton stewed with vegetables; potatoes, boiled or mashed; pickled cabbage or beets; bread.

SUPPER—Bread and milk.

T U E S D A Y.

BREAKFAST—Hominy and milk or molasses; bread and butter.

DINNER—Roast beef, with gravy; potatoes, boiled or mashed; bread.

SUPPER—Bread and milk.

W E D N E S D A Y.

BREAKFAST—Cocoa or broma; bread and butter.

DINNER—Stewed beef; potatoes, boiled or mashed; bread; rice, bread, or Indian pudding.

SUPPER—Bread and milk.

T H U R S D A Y.

BREAKFAST—Cocoa or broma; bread and butter.

DINNER—Roast beef, with gravy; potatoes, boiled, mashed or fried whole in the meat drippings; pickled cabbage or beets; bread.

SUPPER—Wheaten grits and milk; bread.

F R I D A Y.

BREAKFAST—Mush and milk or molasses; bread and butter.

DINNER—Codfish or haddock, with potatoes; bread and butter.

SUPPER—Bread and milk.

S A T U R D A Y.

BREAKFAST—Cocoa or broma; bread and butter.

DINNER—Roast mutton; potatoes, boiled or mashed; bread.

SUPPER—Bread and milk.

S U N D A Y.

BREAKFAST—Hominy, and milk or molasses; bread and butter.

DINNER—Roast beef, with gravy; potatoes, fried whole in the meat drippings; rice, bread, or Indian pudding.

SUPPER—Wheaten grits and milk; bread and butter.

Your committee has few changes to suggest in the dietary of the Quarantine and the Infants' Nursery. The only modifications which seem necessary are an improvement in the quality of the cocoa, by using more milk, (equal parts of milk and water, as before suggested), in the Quarantine, the use of milk less diluted (six parts of water to one of condensed milk) for supper, and the addition, daily, of potatoes to the dinner at both the Quarantine and the Infants' Nursery.

The above report is respectfully submitted.

A. FLINT, jun., *Ch.*,
H. N. WHITTELSEY,
W. B. EAGER, jun. } Committee.

New York, Oct. 21, 1867.

OCTOBER 23, 1867.

Resolved, That the Dietary Table recommended by the Committee appointed to revise the Dietary Table for Randall's Island Nurseries be adopted, and that the Warden be instructed to carry the same into effect immediately. *Adopted.*

